

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
ON APPEAL FROM THE EXAMINER TO THE BOARD  
OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Nathan R. Belk  
Serial No.: 10/694,074  
Filing Date: October 27, 2003  
Group Art Unit: 2622  
Confirmation No.: 3795  
Examiner: Brian P. Yenke  
Title: *An Integrated Channel Filter and Method of Operation*

**MAIL STOP APPEAL BRIEF - PATENTS**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

**REPLY BRIEF**

Pursuant to 37 C.F.R. § 1.193, Appellant respectfully files this Reply Brief in response to the Examiner's Answer dated June 1, 2009.

Appellant filed an Appeal Brief on January 9, 2009 explaining clearly and in detail why the final rejections of Claims 1-8, 10-11, and 26-27 are improper and should be reversed by the Board. As explained in more detail below, the Examiner's final rejection of these claims cannot be properly maintained. Appellant respectfully requests Board of Patent Appeals and Interferences (the "Board") to reverse these final rejections and instruct the Examiner to issue a Notice of Allowance with respect to these claims. In response to the Examiner's Answer, Appellant respectfully submits herewith this brief in reply.

**Argument**

The Examiner's Answer consists of substantially similar arguments to those presented in the Final Office Action, along with a section responding to Appellant's arguments presented in the Appeal Brief. To reduce the burden on the Board, Appellant specifically addresses only the section of the Examiner's Answer directed to Appellant's arguments in the Appeal Brief. The remaining portions of the Examiner's Answer have already been addressed in Appellant's Appeal Brief.

**I. Independent Claims 1 and 26 (and their respective dependent claims) are patentable**

Claims 1-8, 10-11, and 26-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,177,964 B1 issued to Birleson, et al. ("*Birleson*"), in view of U.S. Patent No. 7,196,737 B1 issued to Fulga, et al. ("*Fulga*"). For at least the following reasons, Appellant respectfully submits that these rejections are improper and should be reversed by the Board.

**A. *Birleson* and *Fulga* both teach away from the claims.**

Applicant maintains that both references the Examiner cites, *Birleson* and *Fulga*, teach away from the claims. The Examiner, in his answer, asserts that *Birleson* discloses an "all pass filter for the frequency band of 55-806 MHz [the television broadcast band] would in fact require some filtering to eliminate/filter [non-TV signals]." Examiner's Answer at page 5. Therefore, according to the Examiner, "with respect to filtering only TV channels [grouped in some way] all pose as selective groups to select/filter/prefilter in order to reduce the number of channels received by an all TV pass filter." Examiner's Answer at pages 5-6. This does not address Applicant's teach away argument that *Birleson* expressly passes all channels in the television band.

First, a filter that eliminates non-TV signals is irrelevant to the claims which recite a "filter operable to receive an input signal comprising a first number of *television* channels." Next, *Birleson* expressly rejects the Examiner's proposal to filter TV channels. As Applicant discussed in the Appeal Brief, *Birleson* disclosed that having minimal filtering on the input stages "eliminates the need for precisely controlled variable tuned filters" which were a "critical drawback of previous tuners that had to be eliminated because it is a source of

tremendous error and distortion.” *Birleson* col. 3, lines 9-24. *Birleson* discloses that the filter of *Birleson* is “not a narrow band pass tracking filter which attenuates most television channels from the received signal. Instead, filter 101 passes all channels in the television band.” *Birleson* col. 7, lines 58-60. This is in direct contradiction to the Examiner’s assertion that *Birleson* discloses filtering channels in selective groups. Put simply, *Birleson* discloses that **all** television channels are passed.

Moreover, Applicants maintain that *Fulga* also teaches away from the proposed combination. In particular, *Fulga* states that the “input filter 101 [of *Birleson*] is not tuned to select a few channels but instead passes all channels in the television band.” *Fulga* col. 2, lines 66-67. Unlike the Examiner, *Fulga* recognizes that *Birleson* teaches that the input filter passes all channels in the television band. Moreover *Fulga* teaches that all channels in the television band should be passed to the tuner. “In operation, the front end of the TV tuner receives the **entire television band** through the filter 101 and the amplifier 102.” *Fulga* col. 3, lines 61-63 (emphasis added). Therefore, similar to *Birleson*, *Fulga* also teaches that the entire television band is passed through filter 101 in direct contradiction to the Examiner’s assertions. The Examiner does not respond to this argument.

In responding to Applicant’s argument that the test recited in *KSR v. Teleflex* leads to the opposite conclusion the Examiner reached, the Examiner again asserts that “*Birleson*’s integrated TV circuit, eliminated the use of an external prefilter located off-chip, thus in modifying *Birleson* by place a filter on chip, this would enhance, not detract from *Birleson*’s intended purpose/function of a single integrated circuit which could receive TV channels.” Examiner’s Answer at page 6. Again, the Examiner’s assertion that placing a filter on chip would enhance *Birleson*’s teachings is in direct contradiction to *Birleson*’s disclosure that “filter 101 passes **all** channels in the television band,” because this “**eliminates the need for precisely controlled variable tuned filters**” that are a “**critical drawback of previous tuners.**” *Birleson* col. 3, lines 9-24 and col. 7, lines 58-60. A person of ordinary skill in the art, reading *Birleson*, would conclude that adding an input filter, as the Examiner suggests, would be undesirable and would choose instead to eliminate an input filter.

By continuing to ignore portions of *Birleson* and *Fulga* that teach away from the claims, the Examiner has disregarded the admonitions of the Supreme Court and the Federal Circuit along with the M.P.E.P. to consider a reference as a whole, including portions that teach away from the claims. The Examiner has not done so and has failed to demonstrate a

*prima facie* case of obviousness. For at least the above reasons, independent Claim 1 is allowable over the cited references. Accordingly, the Board should reverse the final rejection of independent Claim 1 and all its dependent claims and instruct the Examiner to issue a notice of allowance of the same. Independent Claim 26 recites elements similar to those discussed above with respect to Claim 1. For at least the above reasons, the Board should reverse the final rejection of independent Claim 26 and all its dependent claims and instruct the Examiner to issue a notice of allowance of the same.

**B. The Examiner's reasoning would change the principle of operation of *Birleson***

The Examiner's reasoning would require a change in the principle of operation of *Birleson*, which is another reason why the Examiner has failed to show a *prima facie* case of obviousness. See M.P.E.P. ch. 2143.01. The *Birleson* filter "passes **all** channels in the television band." *Birleson* col. 7, line 61 (emphasis added). The operation of *Birleson* is described as having the "front end of tuner 10 receiv[ing] the **entire** television band through filter 101 and amplifier 102." *Birleson* col. 8, lines 40-41 (emphasis added). Moreover, some of the other components of the tuner 10 in *Birleson* are designed to operate based on the front end of tuner 10 receiving the **entire** television band. *Birleson* col. 8, line 42 through col. 9, line 37. By filtering other television channels at the front end, as the Examiner suggests, the principle of operation of tuner 10 in *Birleson* would change.

For at least the above reasons, independent Claim 1 is allowable over the cited references. Accordingly, the Board should reverse the final rejection of independent Claim 1 and all its dependent claims and instruct the Examiner to issue a notice of allowance of the same. Independent Claim 26 recites elements similar to those discussed above with respect to Claim 1. For at least the above reasons, the Board should reverse the final rejection of independent Claim 26 and all its dependent claims and instruct the Examiner to issue a notice of allowance of the same.

**CONCLUSION**

Appellant has demonstrated that the present invention, as claimed, is clearly distinguishable over the prior art cited by the Examiner. Therefore, Appellant respectfully requests the Board to reverse the final rejections and instruct the Examiner to issue a Notice of Allowance with respect to all pending claims.

No fees are believed due; however, the Commissioner is authorized to charge any additional fees or credits to Deposit Account No. 02-0384 of Baker Botts, L.L.P.

Respectfully submitted,

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Dated: July 27, 2009

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